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ABSTRACT

In spite of widespread concerns about low academic achievement nationally, parents generally have expressed satisfaction with their own children's achievement and schools, largely because their children's grades suggest that they are doing well. This report examines what student grades tell about achievement through the use of data from the National Education Longitudinal Study of 1988 (NELS:88). Overall, the average grade today is a "B." Comparisons of schools in high-poverty areas and those in more affluent areas indicate that "B" students in high-poverty schools have about the same NELS:88 test scores as do students receiving "D" or lower in schools with the lowest concentrations of poor students. "C" students in the poorest schools had about the same test scores as failing students in the most affluent schools. While NELS:88 scores are only one indicator, other indicators also show the need to improve the quality of education in schools, particularly in poverty areas. Parents need to ask how grades are determined, and whether the student is receiving an appropriately challenging education. (Contains 3 references.) (SLD)

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OFFICE of RESEARCH

Education

# Research Report

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## What Do Student Grades Mean? Differences Across Schools

Recent calls for a voluntary system of assessments tied to national standards have led to both supporters and detractors of such a system. Supporters see it as a way of improving education, while some detractors see it as a federal intrusion on education, despite the fact that such a system would be developed by state and local education systems and would be voluntary. Others believe that such a system could be unfair to students who live in high poverty areas, because they might be less well prepared for the assessments. We suggest that the current education system is unfair to such students, because they and their parents are not provided with information they need to judge the quality of their education.

A prior *Research Report* on parental satisfaction with schools and the need for standards (November 1992) showed that, despite clear indications and widespread concern about low achievement, most parents express satisfaction with their children's achievement and schools. Part of the reason for their satisfaction is that parents have to rely primarily on grades to determine how much their children are learning—and according to the grades, their children are doing well.

In this report, we examine more closely what student grades tell us about achievement, using data collected about public school students in the National Education Longitudinal Study of 1988 (NELS:88). NELS:88, which was conducted by the National Center for Education Statistics, includes a wide variety of information on a sample of eighth grade students across the nation. For these analyses, we examined public school students' reports of their grades in English and math and their NELS:88 test scores in these subjects by the poverty level of their schools. The NELS:88 tests, while short—the reading test consisted of 5 short passages followed by 21 comprehension and interpretation questions, and the math test consisted of 40 items—provide comparable information for students across schools.

### What Grades Do Students Receive?

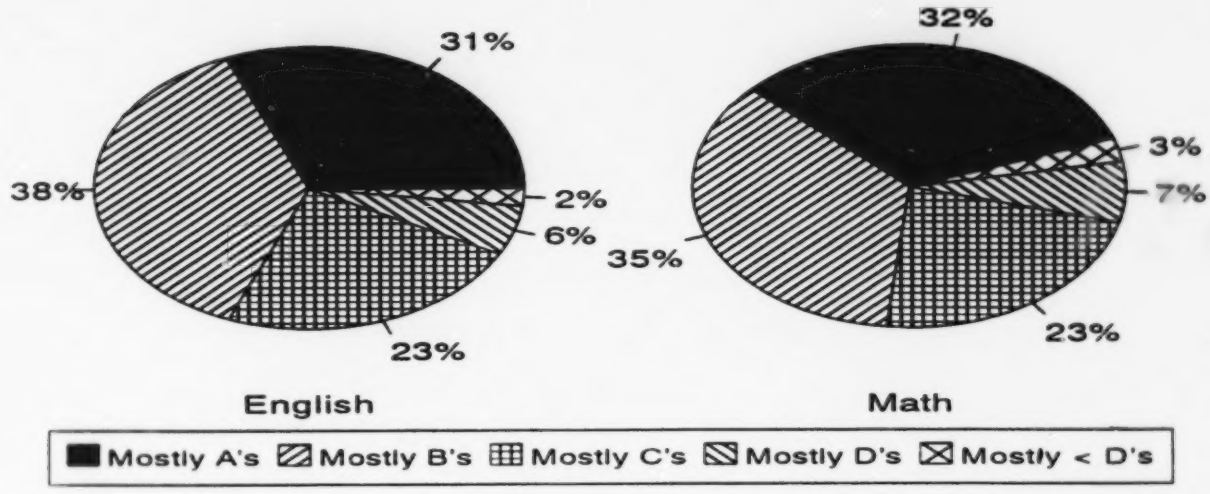
Anyone who considers the "gentleman's C" to be an average grade is seriously behind the times: today's "average" grade is a "B" (see figure 1). Eighth grade students, when asked about their English grades from grade six to the present, reported receiving the following distribution of grades:

- Mostly A's — 31 percent;
- Mostly B's — 38 percent;
- Mostly C's — 23 percent;
- Mostly D's — 6 percent; and
- Mostly less than D's — 2 percent.

They reported receiving similar grades in mathematics, with about two-thirds of students saying they had received mostly A's and B's.

Students in high poverty schools (as measured by the percentage of students in the school who receive free or reduced price lunch—a commonly used measure of poverty) are somewhat less likely to get A's, but they also receive good grades (the average grade was still a B). In high poverty schools (those

**Figure 1.—Eighth grade students' reports of their grades from grade 6 to the present**




schools where over 75 percent of students receive free or reduced price lunch):

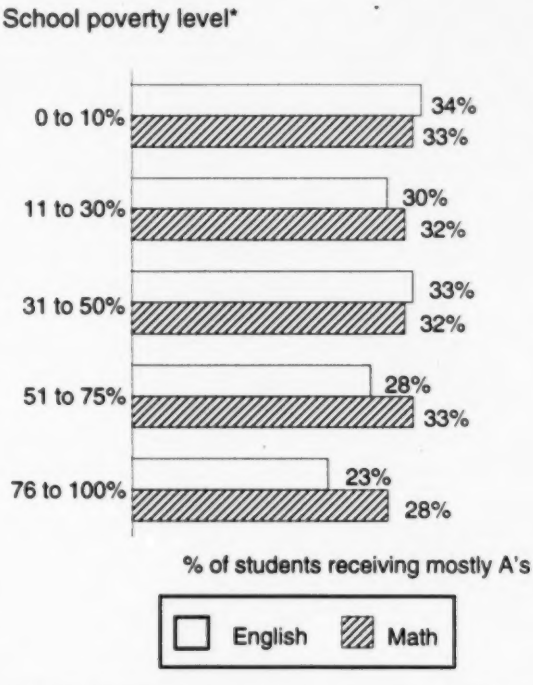
- 23 percent of students reported having received mostly A's in English, and 38 percent reported getting mostly B's.
- 28 percent reported receiving mostly A's in math, and 32 percent reported getting mostly B's (see figure 2).

Teachers may have very good reasons for giving the grades they do: an honest appraisal of a student's work compared to other students in the class, or perhaps an attempt to motivate students. Given the general trend of grade inflation, however, grades may not provide students and their parents with solid feedback to show them how the students are really doing, and the situation may be especially severe for students in high poverty schools.

## Grades and Student Achievement

Within each school poverty category (see table 1), there is a clear relationship between grades and test scores: the students who report receiving the highest grades have the highest test scores. For example, in the most affluent schools—those where no more than 10 percent of students receive free or reduced price lunch—the "A" students received an average score on the NELS:88 math test of 57.6, and the "D" students received an average score of 45.0.

**Figure 2.—Percentage of eighth grade students reporting mostly A's from grade six to the present, by school poverty level***




*"School poverty level" is the percentage of students in the school who receive free or reduced price lunch.

**Table 1.—Mean test scores in reading and math, by student's grades from grade six to the present and the percentage of students in the school receiving free or reduced price lunch**

| Grades | Percentage of students receiving free or reduced price lunch | | | | |
|---|---|---|---|---|---|
| | 0-10 | 11-30 | 31-50 | 51-75 | 76-100 |
| English grades | | Reading Scores | | | |
| Mostly A's | 56.5 | 55.2 | 52.7 | 49.2 | 46.0 |
| Mostly B's | 51.7 | 50.2 | 48.7 | 46.2 | 44.8 |
| Mostly C's | 47.0 | 46.5 | 45.3 | 44.1 | 41.3 |
| Mostly D's | 45.0 | 44.9 | 44.8 | 41.5 | 38.2 |
| Mostly <D's | 44.5 | 42.7 | 41.4 | 39.6 | 37.5 |
| Math grades | | Math Scores | | | |
| Mostly A's | 57.6 | 55.1 | 52.7 | 49.2 | 45.7 |
| Mostly B's | 52.9 | 51.2 | 48.7 | 45.0 | 43.0 |
| Mostly C's | 47.8 | 46.0 | 44.9 | 43.0 | 41.0 |
| Mostly D's | 45.0 | 43.4 | 42.9 | 42.1 | 40.0 |
| Mostly <D's | 43.1 | 42.1 | 41.1 | 39.3 | 38.9 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988.

When we look across different types of schools, however, we see another picture: "A" students in the high poverty schools received lower scores, on average, than did their counterparts in the more affluent schools.

How well is an "A" student in a high poverty school doing compared to his or her counterpart in a more affluent school? These students are at a serious disadvantage, as measured by the reading and math tests given as part of the NELS:88 data collection:

- **Reading:** Students in high poverty schools (those where more than 75 percent of students receive free or reduced price lunch) who received mostly A's in English got about the same reading score as did the "C" and "D" students in the most affluent schools.

- **Math:** The "A" students in the high poverty schools most closely resembled the "D" students in the most affluent schools.

The "B" students in the schools with the highest poverty concentrations received about the same test scores as the students who received D's and less than D's in the schools with the lowest concentrations of poor students. The "C" students in the poorest schools got about the same test scores as the failing students in the most affluent schools.

One can argue, of course, that the NELS:88 tests are only one small measure of student performance and that it is not fair to make sweeping generalizations about student achievement from this one test. Other studies, however, also have pointed out the problems of low achievement in high poverty schools. All of these sources, not just NELS:88, indicate the need to improve the quality of education in these schools.

One reasonable step to improve the quality of education in high poverty schools may be to provide students and parents with accurate information about how much students are learning and what additional courses they should take to be more competitive with students from more affluent areas. Without such information, students will have no way of knowing how prepared—or unprepared—they are for further education or the work force. How fair is it for a student who has received A's and B's all through school to arrive at college and find that he

or she is unprepared for college-level math courses? Wouldn't it be better to provide these students with an accurate picture of how they are doing early, so that they and their parents will know where improvements need to be made?

## Recommendations

Parents should ask their child's teachers and principal how their son's or daughter's grades are determined, and whether the student is receiving an appropriately challenging education. Parents may want to ask the following questions:

- What is the average grade in my child's class? What percentage of students receive A's and B's?
- What types of classes is my child taking—college bound, general, or technical? How much difference is there in the subject matter covered by the college and general courses?
- How many students in the high school go on to college, technical training, etc.?
- How do local business people rate the quality of high school graduates as employees?
- How well do the students who go on to college or technical training courses do in their courses? What math courses do they take in college—regular college-level courses or remedial courses? What grades do they receive in the regular college-level courses?

If your child's principal or teachers cannot answer these questions, ask them why they don't know the answers. As a parent, you have the right to know the quality of the education your child is receiving.

This *Research Report* is part of a series published by the Office of Educational Research and Improvement for teachers and parents. If you would like to suggest topics for future *Research Reports*, please write to: Office of Research, U.S. Department of Education, 555 New Jersey Avenue NW, Room 610e, Washington, DC 20208-5648. To be added to the *Research Report* mailing list, send your name and address to OERI *Research Reports*, Outreach Office, 555 New Jersey Avenue NW, Washington, DC 20208–5570. This report is a public document and may be reproduced in part or in its entirety without permission. Please credit OERI.

## References

U.S. Department of Education, Office of Educational Research and Improvement. *Parental Satisfaction With Schools and the Need for Standards.* Washington, DC: November 1992.

U.S. Department of Education, Office of Educational Research and Improvement. *User's Manual: National Education Longitudinal Study of 1988. Base Year: Student Component Data File User's Manual.* Data Series: DR-NELS: 88-88-1.2. Washington, DC: March 1990.

**Notes**: (1) The data in this report are from the National Education Longitudinal Survey of 1988 (NELS:88), which was conducted by the National Center for Education Statistics. NELS:88 includes surveys of eighth grade students, their parents, and their teachers, and provides information on family characteristics, school characteristics, and student achievement. (2) Tables of standard errors and numbers of cases are available on request. This report was prepared by Judith Anderson, Office of Research of the U.S. Department of Education.

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